Targeted Brownfields Assessment Phase II Environmental Site Assessment

Former Georgetown Police Department and Call Center
Department of Environmental Protection Agency Interest #79227
Scott County
Georgetown, KY

Prepared By: Daniel J. Phelps, Geologist III Kentucky Registered Professional Geologist # 1860

Kentucky Division of Waste Management 14 Reilly Road Frankfort, KY 40601

June 2008

Table of Contents

1.	Executive	Summary	7

- 2. Introduction
 - 2.1. Purpose
 - 2.2. Limitations and Exceptions of Assessment
 - 2.3. Methodology Used
- 3. Background
 - 3.1. Site Description and Features
 - 3.2. Physical Setting
 - 3.3. Site History and Land Use
 - 3.4. Current Uses of the Properties
 - 3.5. Adjacent Property Land Use
 - 3.6. Summary of Previous Assessments
- 4. Phase II Activities
 - 4.1 Field Explorations and Methods
 - 4.2 Sampling and Chemical Analyses and Methods
- 5. Presentation of Results
 - **5.1 Subsurface Conditions**
 - 5.2 Analytical Data
- 6. Discussion
- 7. Photographs of Site
- 8. Signatures of Environmental Professionals
- 9. Attachments

Attachment 1: Asbestos Study Attachment 2: Analytical Data

1.0 Executive Summary

At the request of Georgetown, Kentucky, and under the EPA's Kentucky Targeted Brownfields Assessment Program Grant, Kentucky Division of Waste Management (KDWM) has performed a Phase II Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1903-97, on property known as the former Georgetown Police Department and Call Center at 550 Bourbon Street in Georgetown, Kentucky.

This assessment did not reveal any contamination in the soil at the property. The presence of asbestos in the building materials was confirmed. Therefore, the building materials should not be disturbed without taking this contamination into consideration. Furthermore, the presence of metals and lead-based paint assure that, if the building is demolished, the debris will have to pass various TCLP analyses before it can be disposed of in a municipal landfill.

2.0 Introduction

Georgetown City representative/engineer Eric Larson applied to the KDWM to perform a Phase I Environmental Site Assessment of the former Georgetown Police and Call Center at 550 Bourbon Drive. Under the Kentucky Targeted Brownfields Assessment Program, an ASTM Phase I investigation was conducted in order to identify any potential or real environmental conditions. The Phase I identified the potential for recognized environmental conditions in connection with the former pencil factory and underground storage tank (UST) on the property. Based on the information obtained during the Phase I, this Phase II investigation was carried out.

2.1 Purpose

The purpose of this Phase II Environmental Site Assessment (ESA) is to determine, to the extent practical, the degree and/or extent of contamination of a range of contaminants that are within the scope of CERCLA/SARA. Although asbestos is specifically excluded from CERCLA/SARA, an asbestos study was commissioned due to public health concerns. The asbestos study is provided as attachment 1.

The Phase II ESA is a general characterization of environmental contamination based on sampling data. The data used for this site consisted of twelve (12) soil samples taken from borings advanced at various locations outside the building, including soil samples advanced to one meter below the bottom of the unleaded gasoline underground storage tank, and a soil sample from within the crawl space on the north side of the building.

This Phase II ESA was conducted in accordance with the guidelines established by ASTM E 1903-97.

2.2 Limitations and Exceptions of Assessment

The findings and opinions are relevant to the dates of the site work and should not be relied on to represent conditions at substantially later dates.

The opinions included herein are based on information obtained during the study and professional experience. If additional information becomes available which might impact these environmental conclusions, we request the opportunity to review the information, reassess the potential concerns, and modify our opinion, if warranted.

No ESA can eliminate all uncertainty. Furthermore, any sample, either surface or subsurface, taken for chemical analysis may or may not be representative of the larger population. Although this assessment has attempted to identify the contamination on the subject property, additional sources of contamination may have escaped detection.

Additional services, including a broader scope of assessment, more detailed conclusions; liability/risk evaluation, radiological testing, and remediation techniques, etc. were beyond the scope of this Phase II ESA.

2.3 Methodology Used

Based on the areas of concern defined by the Phase I investigation, borings were advanced by GeoProbe at various locations outside the building, to one meter below the bottom of the UST, and a grab soil sample was collected from beneath the crawl space. Twelve (12) containers were sampled and properly disposed of.

EPA SW846 SW 8260 B and 8310 were selected as the analytical methodologies to determine the presence and concentration of volatiles in the soil in the areas selected for sampling.

All procedures for sample collection, preservation, and handling, chain of custody, and field equipment operation followed US EPA Region 4's SESD Operating Procedure SE SDPROC-300-R1. KDWM supplied all required sampling equipment and sample containers as required by EPA SW846 methods.

Sample control and documentation was conducted in accordance with SESD Operating Procedure SE SDPROC-300-R1. The sample information was also entered into the chain of custody form to ensure proper sample tracking. Chain of custody procedures were maintained throughout the sampling, analysis, and data validation process and were reviewed before the samples were taken to the laboratory and by the Project QA officer upon receipt of data from the laboratory.

Call Center

200 0 200 400 Feet

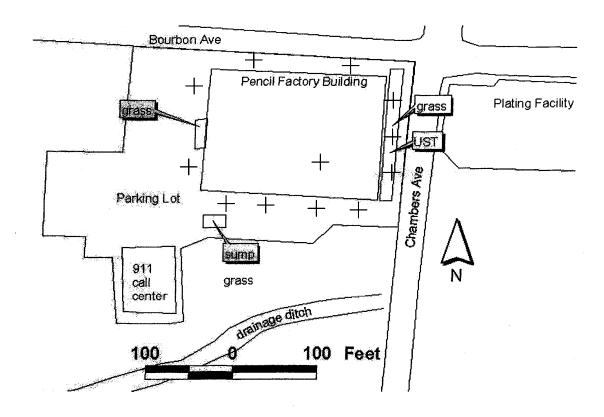
Map 1. Aerial Photo of former Police Station/Mallard Pencil Factory.

3.0 Background

3.1 Site Description and Features

The former Georgetown Police Department and Call Center is located in Georgetown in Scott County, Kentucky. The site is located inside the City Limits at 550 Bourbon Street. The site can be accessed via Bourbon Street to the north and Chambers Avenue to the east.

The subject site is located in Scott County, Kentucky, at the following decimal degree coordinates: N 38.21229°, W 84.55371°.



Map 2. Major features of the Georgetown Police Station. Soil Borings symbolized by +.

3.2 Physical Setting

The site occupies approximately two acres of a relatively flat area gently sloping to a drainage ditch located the South (see Map 2). The land to the north and west is residential and also slopes to the south. The land to the east is occupied by both residential and light industrial building, including Electro-Shield Plating. The area south of the site slopes northward towards the small drainage ditch located on the southern portion of the site.

3.3 Site History and Land Use

The site had been a vacant lot until the 1940's when the main building was constructed. The pencil factory began operations in 1946. The Mallard Pencil Factory continued operations until the mid-1980's. The building was extensively remodeled and was used as a police station from 1996 to 2006.

Presently, the building is unoccupied and is used to store some of the Georgetown Police Department's surplus property, and criminal evidence. The building is posted, but there are no barriers to prevent persons from trespassing onto the surrounding area. The grassed areas are

mowed and otherwise maintained by the Georgetown Police Department. The parking lot is used for overflow parking for the adjacent 911 dispatch building.

The Georgetown Police Department has expressed the desire to demolish the building. There is structural damage to several of the building supports. This damage was unwittingly done during repairs to the plumbing system in which the structural integrity of several steel beams were compromised.

3.4 Adjacent Property Land Use

Most of the surrounding area is residential. The Electro-Shield Plating Company is located to the east and the 911 Call Center is located south and southwest of the site.

3.5 Summary of Previous Assessments

The Phase I Environmental Site Assessment by Kenny Logsdon, PG, of the Kentucky Division of Waste Management, dated October 2007, included an historical review of the property's previous uses and concluded that the site needed further Phase II investigation based on its previous use, the likelihood of asbestos at the site, artificial fill under the building, unlabeled containers, and the UST located on the site. Areas of concern related to these items could be a potential source for impacts to soil and groundwater.

4.0 Phase II Activities

4.1 Field Explorations and Methods

Field exploration consisted of advancing borings to the soil/bedrock interface in various areas outside the building and to one meter below the underground storage tank. Soil samples were submitted to the lab for analysis. Moreover, soil from the artificial fill under the building was sampled in the soil exposed in the crawlspace illustrated in Figure 18. No groundwater was encountered during the course of the investigation. Various containers that were left on site were catalogued by an independent contractor and removed to a hazardous waste landfill.

GPD SOIL BORING	LAT.	LONG.	BEDROCK DEPTH	SAMPLE DEPTH
B-1	N 38.21248°	W 84.5536°	6'8"	1.5'
B-2	N 38.21267°	W 84.5533°	5'3"	2.5'
B-3	N 38.21279°	W 84.55316°	5'3"	2.5'
B-4	N 38.21265°	W 84.55281°	5'9"	2.5'
B-5	N 38.21246°	W 84.55242°	8'6"	2.5'
B-6	N 38.21230°	W 84.55245°	7'8"	2.5'
B-7	N 38.21220°	W 84.55245°	7'8"	5'
B-8	N 38.21213°	W 84.55260°	8'10'	5'
B-9	N 38.21217°	W 84.55277°	4'2"	4'
B-10	N 38.21218°	W 84.55298°	3'10"	2.5'

B-11	N 38.21218° W 84.55315°	9'4"	4'
B-12	Under Bldg. crawl space (Fig. 18)	NA	1' horizontal

4.2 Sampling and Chemical Analyses and Methods

All procedures for sample collection, preservation, handling, chain of custody, field equipment operation, decontamination and preventive maintenance followed US EPA Region 4's SESD Operating Procedure SE SDPROC-300-R1.

The sampling designs and methods used were based on established standards <u>ASTM E 1903-97</u> Environmental Site Assessments: Phase II Environmental Site Assessment Process, <u>Region IV SESD Operating Procedure SE SDPROC-300-R1.</u>

McCoy & McCoy Laboratories, Inc., P.O. Box 907, Madisonville, KY 42431 (Telephone 270 821-7375) analyzed all the samples.

An Asbestos Survey was performed by ARC Safety and Environmental Services.

5.0 Presentation of Results

Sampling near the Underground storage tank, the perimeter of the building and beneath the building did not reveal the presence of any volatile, semi-volatile, or RCRA metal constituents above action levels. The laboratory results for the sample are provided as Attachment 2.

No groundwater was encountered in the borings made for this investigation and thus was not sampled.

The Asbestos Survey by ARC Safety and Environmental Services of 110 Saint James Court, Frankfort KY 40601 (Attachment 1) showed that various floor tiles and HVAC ducting in the basement crawl spaces contain or are highly likely to contain asbestos.

6.0 Discussion of Findings and Conclusions

This investigation has not revealed any metal, volatile, or semi-volatile contamination at the property. The analysis of the soil borings revealed no contamination above USEPA Region IX levels for metals, volatiles or semi-volatiles. No groundwater was encountered in any of the borings. However, the asbestos survey revealed evidence for asbestos contamination. Therefore, the asbestos contamination will have to be contained and removed before the rest of the building is demolished.

Proper disposal of the materials encountered in various containers in the building's basement (figures 11 to 17 and Figure 22), and the plastic barrel outside to the south of the basement (Figure 1) will be required.

If the building is demolished, the debris must be TCLP analyzed for lead based paint before it can be disposed of in a municipal landfill. Please note that no interior wipe samples were performed to evaluate surface dust at the site. Precautions should be taken in the event of razing the building to control dust migration and inhalation issues. Furthermore, the light

tubes, light ballasts, Mercury thermostats, and emergency light and exit sign batteries must be properly disposed of.

SITE PHOTOGRAPHS



Figure 1. Southeast corner of building looking west. (south side of building)



Figure 2. Southeast corner of building looking north. (east side of building)



Figure 3. Vent pipe for UST on east side of building (see Fig. 2).



Figure 4. Northeast corner of building looking south. (east side of building)



Figure 5. Northeast corner of building looking west. (north side/front of building)



Figure 6. Northwest corner of building looking east (north side/front of building)



Figure 7. Northeast corner of building looking south. Note 911 call center and cell-phone antenna mast to the south. (east side of building/side entrance)



Figure 8. View from north side of building looking north across Bourbon Street.



Figure 9. View from North side of building looking North across Bourbon Street.



Figure 10. Inside lower level near east wall. Heat system located adjacent to UST tank which is outside the building.



Figure 11. Solvents located on lower level, near the heating system.



Figure 12. "Blue Solve" label on small drum from Fig. 11.



Figure 13. Another container, apparently of a solvent.



Figure 14. Various paint and chemical containers located on lower level along inside south wall.



Figure 15. Paint container on lower level.



Figure 16. Container labeled "MEK" (possibly Methyl Ethyl Ketone?)



Figure 17. Various containers for solvents (?) and fuel (?) on lower level.



Figure 18. Breach in north wall of lower level showing exposure of artificial fill under building. Several small fragments looked like slag material.



Figure 19. Another breach in the north wall of the lower level showing fill material behind wall.



Figure 20. Another breach in the north wall, lower level. Note fill material.



Figure 21. Another breach in the north wall, lower level. Note fill material.



Figure 22. Solvent (?) containers in what looks like a janitor's storage area on lower level.

7.0 Signatures of Environmental Professionals

Prepared by:		
Daniel J. Phelps, P.G. Geologist III	Date	
Reviewed by:		
Herbert Petitjean Environmental Scientist III	Date	
Approved by:		
Fazi Sherkat, PE Manager, Superfund Branch	Date	

Attachment 1 Asbestos Survey

Attachment 2 Analytical data